X-pand into the Future

eurex *circular 171/05*

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Introduction of a Central Counterparty (CCP) at the Irish Stock Exchange (ISE) Documents for ISE CCP Member Simulation

Related Eurex Circulars: 057/05

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Content may be most important for:

- Front Office + Trading
- Middle + Back Office
- IT / System Administration

Attachments:

1. ISE CCP Member Simulation Guide
2. ISE/ECAG Member Simulation Scripts and Schedules
3. CREST Participant Testing Checklist

As announced in the communication calendar, we are sending you today supporting documents for ISE CCP simulation.

The “ISE CCP Member Simulation Guide” describes key dates for the course of the ISE CCP simulation.

The “ISE/ECAG Member Simulation Scripts and Schedules” serve as a guideline for testing the new ISE CCP functionality from order entry in ISE Xetra through settlement in CREST to Risk-based Margining in Eurex.

The “CREST Participant Testing Checklist” contains CREST test scenarios for settlement via CREST.

Irish Stock Exchange

DEUTSCHE BÖRSE GROUP

eurex

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ISE CCP Release

A Central Counterparty for securities traded on the Irish Stock Exchange's order book

Member Simulation Guide

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1 Introduction

1.1 Simulation Concept

The Member Simulation Guide describes the simulation approach of ISE CCP for ISE trading and ECAG clearing members. In addition, CRESTCo, who is also part of the ISE CCP simulation, is referenced in the document. The document describes all necessary simulation related details (calendar, instruments, etc.).

The ISE CCP Simulation is scheduled between October, 04th, 2005 and October, 28th, 2005. The Simulation will be open, i.e. unguided and participation in focus days will be optional. Nevertheless, simulation scripts which contain the new functionality of ISE CCP will be provided to the members. On the basis of the simulation scripts the members are able to control if their simulation is successful.

The ISE CCP functionality will be provided in production on November, 14th, 2005.

All ISE trading members, ECAG clearing members and CREST settlement members for ISE CCP trades are recommended to adhere to the published timetables for simulation execution and production start, thus contributing to a smooth and effective simulation period and a successful production launch for all market participants. Please therefore make sure that this document is communicated as soon as possible within your project teams and furthermore to the line organization where applicable. All parties involved should be aware of their tasks and existing dependencies with other participants before the actual start of simulation.

1.2 Target Group

This document serves as a guide for all ISE trading members and ECAG clearing members participating in the ISE CCP simulation, particularly for all users of the system.

Participation of all ISE CCP Trading and Clearing Members in the simulation is highly recommended. In addition, the participation of the CREST participants who are settlement agents for the ISE CCP trades is necessary. The requirements for the setup of the CREST members is explained in the CREST PT Checklist. Please contact CREST for further information (see contacts in section 2).

Within the organizations participating in the simulation (ISE trading members and ECAG clearing members), primarily the functional units should actively take part in the simulation, supported by technical operations. The following departments should be involved:

- Trading department
- Clearing, Settlement and other relevant middle-office/back-office functions
- IT Infrastructure and Environment Operations
- Network Operations (WAN and LAN)
- Internal Organization and Process Management

1.3 Simulation Objectives

The purpose of the ISE CCP simulation is to provide members with an opportunity to become familiar with the new ISE CCP services as well as to test the business procedures prior to production.

In line with this objective, the focus of the simulation is as follows:

- Identify possible operations difficulties at an early stage on trading, clearing and settlement.

  ISE Trading and clearing members are strongly encouraged to participate actively in the simulation from the beginning. The simulation provides (as far as possible) a production-like set-up. Early and frequent participation of all members and the involved departments at ISE, Eurex Clearing AG and CRESTCo facilitates the identification and solution of potential problems with respect to infrastructure, business operations or system operations before production launch.

- Adaptation of member internal processes and applications.

  Members might use the simulation to adapt and test any in-house applications in terms of the differentiation between ISE CCP and non-CCP trades. (Please refer to information which has been provided by Eurex via circulation of an FAQ concerning the CCP for the ISE. This FAQ is available on the respective websites (Eurex, CREST, ISE)'). Moreover, it is highly recommended to test the processing of reports.

2 Contacts for ISE CCP Simulation

Members can contact several parties with their questions and comments regarding the simulation using the following numbers:

Contacts at ECAG / DBAG

Customer Support Team

Ph: +49 (0)69 211 – 1 17 00 Monday - Friday 9.00am – 6.00pm CET
E-mail: customer.support@eurexchange.com

Requests in terms of simulation plan and organization can be addressed to the ISE CCP Customer Support Team.

Functional Helpdesk

Ph: +49 (0)69 211 – 1 14 00 Monday - Friday 8.00am – 6.00pm CET
E-mail: msfunctionalhelpdesk@deutsche-boerse.com

Functional ISE CCP questions can be addressed to the Functional Helpdesk ISE CCP.

Helpdesk ISE

Hilary Kelleher

Ph: +35 31 617 4272

E-mail: hilary.kelleher@ise.ie

Ailish Byrne

Ph: +35 31 617 4266

E-mail: ailish.byrne@ise.ie

Contacts at CREST

Ph: +44 (0)20 7849 0588

david.xhall@euroclear.com

Ph. +44 (0)20 7849 0226

jane.bamblett@euroclear.com

3 Member Activities

3.1 Simulation Preparation

The ISE trading and clearing members should use the entire preparation period to get ready for successful participation in the ISE CCP simulation, as the simulation represents a prime opportunity to become familiar with the new features of ISE CCP.

The Static Data Form has been sent out by the ISE to their member firms to collect each members ISE Xetra, CREST and Eurex setup-related data for simulation.

The ECAG Reference data sheet will be sent out to the clearing members which applied for the ISE CCP clearing membership.

In addition to the return of the completed static data form, the following activities have to be completed before the start of the simulation in order to ensure readiness.

3.1.1 Technical Preparation

Technical Connection
Verify the connections to the simulation environments of the appropriate systems ISE Xetra, Eurex and CREST, Trading members and clearing members are encouraged to verify the availability of all applications used in the simulation and that user access is granted to them.

The table below lists the systems needed for the ISE CCP simulation.

System	Actions	Relevant for
Xetra	Trade input	NCM
Xetra	Trade confirmation	NCM, CM
Eurex	Risk Based Margining Calculation	CM
Eurex	Collateral Management	CM
CREST	Supervision of open positions	CM
CREST	Settlement	CM

Please note that CREST users need to connect to CREST via the GUI or file transfer interface. For further information regarding CREST setup please contact CREST directly (for contact information please refer to section 2).

3.1.2 Functional Preparation

The functional preparation of the members should include the setup of the functional units and staff training as well as the conclusion of arrangements with affiliated members, if applicable.

Inhouse processes
The introduction of the ISE CCP may lead to new and/or altered inhouse processes in trading and clearing. Each member is encouraged to finish the adaptations (e.g. staff training and IT applications) prior to the beginning of the simulation period, in order to ensure the seamless integration of the new trading and clearing functionalities into the existing inhouse functionalities.

Relationships between members:

Every ECAG clearing member who does not act as a Trading Member himself needs to ensure that a connected Trading Member will participate together with him as Clearing member in his simulation activities, making sure that the entire process chain will be covered. Also, every member acting as a Trading Member only is advised to take care to it that an agreement is in place with a Clearing Member prior to Simulation start.

Every ECAG clearing member has to have a CM-undertaking or sponsored CM-undertaking status at CREST. Every non-clearing member and every clearing member needs a settlement participant. This could be the non-clearing member or clearing member itself or any other settlement participant. For more information please contact CREST directly (see contacts in section 2).

To ensure the testing of the entire chain the NCMs need to ensure that their clearing member and settlement agent participates in the testing to ensure the testing of the entire chain.

4 Simulation Approach

The simulation will be set up and run as production-like as possible to provide realistic circumstances for testing. In this context, production-like refers to technical as well as functional aspects. Software, interfaces, tools, techniques and processes are to be used as in production later on.

Simulation days will either be settlement days (shown as batch days in the simulation schedule below) or non-settlement days. Only on settlement days will the business day correspond to the calendar day.

For the simulation of ISE Xetra and Eurex, the business day of non-settlement days will correspond to the calendar day of the next settlement day.

On settlement days the trades entered in ISE Xetra will be sent to CREST. On non-settlement days trades may be entered in ISE Xetra, but will be transferred to CREST on the next settlement day.

4.1 General Model

ISE CCP Simulation is characterized by following aspects:

Open Simulation
ISE CCP simulation is defined as an open or free-style simulation. That means, the simulation participant is not requested to execute specific simulation scripts, though the simulation participant should define and process his own simulation scenario to best handle the new CCP functionality internally. Nevertheless, simulation scenarios will be provided together with this document to support the members.

CREST Connection
CREST will take part in the ISE CCP simulation. The CREST simulation system is open daily, Monday – Friday, from 10:00 until 17:00 CET. Please refer to the CREST "PT Checklist" for information about the CREST simulation or contact CREST directly (see contacts in section 2).

Simulation Availability
Basically, three settlement days will take place per week. On these days the intraday settlement as well as the night time processing will take place. ISE trades can be entered via ISE Xetra.

Settlement days alternate with non-settlement days on which the ISE Xetra and Eurex simulation environments remain open for 24 hours. Additionally, the simulation for ISE Xetra and Eurex is accessible on weekends to give members the opportunity to test long-lasting and complex simulation scenarios beyond common working hours.

On non-settlement days no settlement or margin reports will be provided. The reports provided on settlement days may cover trades entered in ISE Xetra on several non-settlement days. Please refer to the simulation calendar in section 5.2 Simulation Calendar to get an overview of settlement days (batch days) and non-settlement days (on-line days where trades could be entered.)

On settlement days the simulation system will close earlier than production in order to avoid any influences on end-of-day processing operations of the production system. A detailed schedule can be found in section 5.3 Daily Schedule.

4.2 Processing

4.2.1 Order Entry and Trade Processing

The current order process is not changed by ISE CCP. The orders are the starting point for a business process and will be entered by the members.

- ISE Xetra
  Orders will be entered via their standard simulation MISSes. ISE Xetra matching occurs automatically. On settlement days the resulting ISE CCP trades are transmitted immediately to CREST. On non-settlement days trades are stored and forwarded on the next settlement day (still having the same trade day).

4.2.2 Settlement

The basic process of settlement in the CCP service at CREST for ISE trades remains unchanged regardless of the introduction of optional settlement netting and the central counterparty. Net settlements are still cash and stock movements with the central counterparty involved in each position, i.e., from "selling" settlement agent's member account to CCP account and from CCP account to the "buying" settlement agent's member account.

Settlement at CREST takes place daily, Monday - Friday. For further information please refer to CREST "PT Checklist" or contact CREST directly (see contacts in section 2).

4.2.3 Risk based Margining

The risk based margining of the ISE CCP is based on risk positions. Eurex Clearing AG is responsible for the risk management process. Risk management for the ISE CCP uses the existing infrastructure of Eurex.

ISE CCP positions are included in intraday and end-of-day margin calculations. The Risk calculation is done on NCM level, separated by client and house.

During simulation the reports for Risk Based Margining are generated every batch day by Eurex and sent to clearing members that participate in the clearing of ISE Central Counterparty trades.

4.2.4 Report Output

ISE CCP-related systems distribute or provide information regarding the respective system's processing results. The different dissemination channels and the respective data output are listed in section 7.2 Reports.

4.3 Participating Systems

Each simulation process will be an end-to-end process that begins with entering orders into the trading system and finishes with the settlement of the trades. Cash settlement can be controlled via CREST cash accounts. From a functional point of view, all member roles are involved (Trading Members, Clearing Members and CREST participants who are settlement agents for ISE CCP trades). From a technical point of view, these processes will span several applications, as listed below:

System	Short Description
ISE Xetra	Electronic cash market trading system
CREST	Trade Enrichment, Netting, Clearing and Settlement,
Eurex	Only the collateral management and margin call functionalities will be required. However, the trading functionality will be available as well

5 Simulation Schedule

5.1 Overview

The following key dates have to be taken into consideration as a basis for simulation planning:

- ISE CCP simulation October 4, 2005 – October 28, 2005
- Start of ISE CCP production November 14, 2005

5.2 Simulation Calendar

The member simulation of ISE CCP will run between October 4 and October 28, 2005. During that period all ISE Trading members, ISE CCP Clearing Members and CREST Settlement Institutions can take part in the ISE CCP simulation.

The member release simulation will be closed two weeks prior to production to ensure operational readiness for production.

The simulation calendar below shows the relevant events for each day

ISE CCP Simulation Calendar
October 04, 2005 – October 28, 2005

40th week	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
Calendar Day	**03.10.2005**	**04.10.2005**	**05.10.2005**	**06.10.2005**	**07.10.2005**	**08.10.2005**	**09.10.2005**
Event		Release Simu ISE CCP	Release Simu ISE CCP	Release Simu ISE CCP	Release Simu ISE CCP	Release Simu ISE CCP	Release Simu ISE CCP
Batch Day	No	Yes	Yes	Yes	No	No	No
Business Day	04.10.2005	04.10.2005	05.10.2005	06.10.2005	10.10.2005	10.10.2005	10.10.2005

41th week	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
Calendar Day	**10.10.2005**	**11.10.2005**	**12.10.2005**	**13.10.2005**	**14.10.2005**	**15.10.2005**	**16.10.2005**
Event	Release Simu ISE CCP	Release Simu ISE CCP	Release Simu ISE CCP Focus Day Corporate Actions: Dividend claim Transformation	Release Simu ISE CCP Focus Day Trade Cancellation	Release Simu ISE CCP	Release Simu ISE CCP	Release Simu ISE CCP
Batch Day	Yes	No	Yes	Yes	No	No	No
Business Day	10.10.2005	12.10.2005	12.10.2005	13.10.2005	17.10.2005	17.10.2005	17.10.2005

42th week	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
Calendar Day	**17.10.2005**	**18.10.2005**	**19.10.2005**	**20.10.2005**	**21.10.2005**	**22.10.2005**	**23.10.2005**
Event	Release Simu ISE CCP Focus Day Corporate Actions: Dividend claim Transformation (Production Like Week in Eurex	Release Simu ISE CCP (Production Like Week in Eurex	Release Simu ISE CCP Focus Day Trade Cancellation (Production Like Week in Eurex	Release Simu ISE CCP (Production Like Week in Eurex	Release Simu ISE CCP	Release Simu ISE CCP	Release Simu ISE CCP
Batch Day	Yes	Yes	Yes	Yes	No	No	No
Business Day	17.10.2005	18.10.2005	19.10.2005	20.10.2005	24.10.2005	24.10.2005	24.10.2005

43th week	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
Calendar Day	**24.10.2005**	**25.10.2005**	**26.10.2005**	**27.10.2005**	**28.10.2005**	**29.10.2005**	**30.10.2005**
Event	Release Simu ISE CCP	Release Simu ISE CCP	Release Simu ISE CCP	Release Simu ISE CCP	End of Release Simu ISE CCP		
Batch Day	Yes	No	Yes	Yes	No	No	No
Business Day	24.10.2005	26.10.2005	26.10.2005	27.10.2005	28-.10.2005	29.10.2005	30.10.2005

5.3 Daily Schedule

Simulation days will either be settlement days (shown as batch days in the simulation schedule above) or non-settlement days. Only on settlement days the business day corresponds to the calendar day.

For the simulation of ISE Xetra and Eurex, the business day of non-settlement days will correspond to the calendar day of the next settlement day.

Note that, the CREST business date will corresponds to the calendar days on each day.

The week of October, 17th, 2005 until October, 20th, 2005 is scheduled to be run with "production like" times in Eurex. The exact timing for report distribution of Eurex reports during this period will be communicated separately.

Time Schedule of Simulation Days				
Time	Xetra	RE	Eurex	Crest
First online day after batch				
	CET	CET	CET	CET
10:00	10:00 Pre-trading (PRETR) 10:15 Opening Auction (OCALL) 10:30 Start of Trading (TRADE)		09:30 – 10:00 Eurex – Pre-trading 10:00 Start of Trading	10:00 Start of Settlement
12:00	12:00 Intra-day Auction (ICALL) 12:15 Trading Phase			
14:00	14:00 Intra-day Auction (ICALL) 14:15 Trading Phase			
17:00				17:00 End of Settlement
Online Day without batch 0:00 – 24:00				
All day	Continuous Trading		Trading	Settlement
Batch day				
10:00		08:30 - Start of System - Intra-day Risk Margining available (every 15 min)		10:00 Start of Settlement
15:00	15:30 – 15:45 Closing Auction (CCALL) 15:45 Post-trading		15:15 Closing Auction (CLAUC) in FESX	17:00 End of settlement
16:00	16:00 End of system availability - batch	16:00 End of system availability - batch	16:00 End of trading 16:00 – 16:30 Post-trading 16:30 End of system availability - batch	
Reports	End of day reports available after 21:00 CET.	End of day reports available after 21:00 CET.	End of day reports available after 21:00 CET.	

For further information about CREST diary events please refer to the CREST "PT Checklist" or contact CREST directly (see contacts in section 2).

6 Simulation Focus Days

6.1 Overview

Due to the fact that for some business events certain data constellations need to be available in the involved systems, focus days will be offered concentrating on corporate actions events and CCP-trade cancellations.

6.2 Corporate Action Events

The specific corporate action events are detailed in the table below:

ISIN	IE0000590798	IE0030606259	IE0002588105	IE0000020408
CA Number	1	1	1	1
CA Description	Dividend	Dividend	Scheme of Arrangement	Take Over
CA Type	CHD	CHD	SOA	TKO
Generates Claims	Yes	Yes	No	No
Record Date	12 Oct 2005	17 Oct 2005	14 Oct 2005	24 Oct 2005
Payment Date	13 Oct 2005	18 Oct 2005	17 Oct 2005	25 Oct 2005
Security Transformed	No	No	Yes	Yes
CA Option	1	1	1	1
Benefit Security	N/A	N/A	IE0002588105	CT2040205001
Currency Code	EUR	EUR	N/A	N/A
Benefit Ratio	0.69	0.35	10.0	0.5
Debit Or Credit	Credit	Credit	Credit	Credit
CA Option			2	2
Benefit Security			CT204005003	CT2040205002
Currency Code			N/A	N/A
Benefit Ratio			1.0	1.0
Debit Or Credit			Credit	Credit
Transformation Date	N/A	N/A	12 Oct 2005	17 Oct 2005
Mandatory Or Voluntary Indicator	Mandatory	Mandatory	Mandatory with options	Voluntary

6.3 CCP-Trade Cancellation

One specific ISIN is defined for testing the trade cancellation. The trade cancellation focus dates are detailed in the table below:

Date	ISIN	Name
13.10.2005 19.10.2005	IE0006765089	TRINITY BIOTECH PLC

Please refer to the "ISE/ECAG Member Simulation Scripts and Schedules" document for further information on the test cases.

7 Simulation Data and Parameters

7.1 Member Data

The ISE CCP recognises three member categories:

- The Non-Clearing Member (ISE Xetra)
- The Clearing Member (Eurex)
- Settlement Participants (CREST)

The members will be set up prior to simulation start with the roles they have specified. Every member is free to set up test users in simulation by submitting the respective form.

7.2 Reports

7.2.1 Available Reports

Report Name	Addressee	Print Report	Raw Data Report
Risk Management			
Premium Margin	NCM/CM	RPTCC010	RAWCC010
Current Liquidating Margin	NCM/CM	RPTCC011	RAWCC011
Theoretical Values III	NCM/CM	RPTCC033	Not available
Theoretical Values IV	NCM/CM	RPTCC034	Not available
Liquidating Values	NCM/CM	RPTCC040	RAWCC040
Additional Margin	NCM/CM	RPTCC045	RAWCC045
Daily Margin YES	NCM/CM	RPTCC050	RAWCC050
Daily Margin Offset	NCM/CM	RPTCC055	RAWCC055
Security/Cash Risk Position	NCM/CM	RPTCC080	RAWCC080
Daily Margin Summary	CM	RPTCC060	RAWCC060
Securities Margin Class and Group Information	CM	Not available	FPMGBP
Theoretical Values: Equities	CM	Not available	FPTHEE
Theoretical Values: Unconditional Subscription Rights	CM	Not available	FPTHES
Trade Report			
Generally each report from ISE can be received on the ISE Xetra MISSes via the usual transport mechanism. A complete list of reports available to ISE Xetra members can be found in the ISE Xetra system documentation. The ISE Xetra reports will be delivered after ISE Xetra simulation closes.	NCM		

7.3 Instrument Data

This section lists all newly set up instruments available for ISE CCP simulation.

7.3.1 ISE CCP Simulation Instruments

CCP-eligible instruments for the Irish Stock Exchange	
ISIN	**Name**
IE0000020408	ABBEY PLC
IE0000527006	DATALEX PLC DL-,10
IE0000590798	DRAGON OIL PLC
IE0001390784	PROVIDENCE RESOURCES PLC
IE0002242869	THIRDFORCE PLC
IE0002588105	PADDY POWER PLC
IE0004614818	INDEPENDENT NEWS & MEDIA PLC
IE0005711209	ICON PLC
IE0006881506	HORIZON TECH GRP ORD EO 0.07
IE0030606259	BANK OF IRELAND
IE0033024807	UNITED DRUG PLC

Non-eligible instruments for the Irish Stock Exchange	
ISIN	**Name**
GB0001482891	VISLINK PLC
GB0001500809	TULLOW OIL PLC
GB0002162385	AVIVA PLC
GB0030365075	REAL ESTATE OPP

CCP-eligible instrument for Focus Days "Trade Cancellation"		
Date	**ISIN**	**Name**
13.10.2005 19.10.2005	IE0006765089	TRINITY BIOTECH PLC

Irish Stock Exchange

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ISE CCP Release

A Central Counterparty for securities traded on the Irish Stock Exchange's order book

ISE/ECAG Member Simulation Scripts and Schedules

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Abbreviations

CCP	Central Counterparty
CLV	Current Liquidation Value
CM	Clearing Member
DBAG	Deutsche Börse AG
DCM	Direct Clearing Member
ECAG	Eurex Clearing AG
GCM	General Clearing Member
GUI	Graphical User Interface
ISE	Irish Stock Exchange
ISIN	International Security Identification Number
NCM	Non Clearing Member
OTC	Over-the-counter

1 Member Simulation Scripts

The member simulation scripts explain which activity steps the participants need to undertake in the ISE CCP simulation in order to test the new functionality. They do not contain special time slots for the simulation. Please also pay attention to the differentiation between the two systems Xetra and Eurex.

The Member Simulation Scripts for ISE and Eurex contain two main parts:

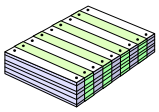
1. Order/Trade Entry
    - Entry of orders for eligible instruments
    - Entry of orders for non-eligible instruments
    - Entry of OTC-trades
    - Trade cancellation (only on focus days)
2. Risk Based Margining
    - Check of Risk Reports for open positions
    - Check of Risk Reports containing corporate actions (only on focus days)

This document does not contain the Simulation Scripts for CREST. For details about CREST Simulation scripts please refer to the CREST "PT Checklist" or contact CREST directly (please see contacts in section 4).

1.1 Script Conventions

Symbols

The following symbols are used as visual orientation aids within this document. They appear in the left margin of the scripts and give additional orientation help, e.g., to retrieve important information or to find a step-by-step walkthrough more quickly.

Symbol	Description
	Indicates the focus / objectives of the script.
	Indicates information about times relevant for the script.
	Indicates a step-by-step walkthrough of the activity.
	Indicates windows used within the activity.
	Indicates information about reports relevant for the script or activity.
	Indicates references within training materials and supporting documentation.

Text Styles

The following text styles are used to highlight words and expressions.

Text Style	Description
Italics	Indicates a component of the Xetra Front End (e.g., window names or fields).
Bold	Indicates a sub-/topic header or references header.

Miscellaneous

Unless explicitly mentioned, the given descriptions and function explanations are valid for all platforms (Sun Solaris, IBM AIX and Microsoft Windows NT (Intel)).

1.2 Order (Trade) Entry



ISE order book trades are executed in the Xetra System and settled in the CREST system. The ISE trades are automatically transferred continuously from trading start until trading end near real-time from Xetra to CREST.

The ISE trades are split into two groups: eligible trades, for which the CCP becomes counterparty and non-eligible trades, for which CCP does not become counterparty.

The following trades are eligible:

- Order book trades in eligible securities.

For eligible trades in Xetra:

- The counterparty is set to "CCPIE". No original counterparty is shown to the market at all.
- Settlement account enrichment is done in CREST.

Xetra generates the confirmations for eligible ISE trades in the following cases:

- For new trades when orders are executed.
- For existing trades when a trade is modified. The following trade attributes can be modified for ISE:
    a. Account type and
    b. Member internal order number and text.
- For the cancellation of a trade (trade reversal), if it was a mis-trade. During simulation the cancellation request will be made directly by the trading member to Market Supervision (Germany). Please refer to the contacts in section 4.

The generated trade confirmations are sent to trading members.

For non-eligible trades in Xetra the processing remains as it is; i.e. the counterparty is continued to be set to the original counterparty.



Xetra Business Date	Each simulation day	
Simulation hours	Batch days	10:00 a.m. - 4:00 p.m. CET
	Online days without batch	00:00 a.m. – 12:00 p.m.CET
Reports available	Next day after batch run	

Prerequisites

- none



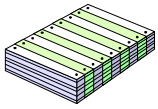
1.2.1 Order Entry for an Eligible Instrument

Steps:

- Open the *(Mass) Order Entry* window or use the *Fast Order Entry* window. Further open the *Own Order Overview* window, *Back Office Information* window, and the *Trade Information* window.
- Enter an order for an eligible instrument and make sure that it is matched against one or several orders.
- Verify that for each matched order one trade confirmation is sent.
- Verify that for eligible trades the counterparty is ECAG ("CCPIE").
- In the *Back Office Information* window check that one trade confirmation (unique trade ID) per matching transaction is sent.
- Open the *Trade Information* window and verify that for an order an execution confirmation for each partial execution is sent.
- Enter a trade modification. Verify that a trade confirmation is sent.
- Verify that all Trade Confirmations are listed in the Daily Trade Confirmation Report TC810.
- Verify that Settlement Agent (SI) and Clearing Member (CM) can see the relevant transactions in CREST. In case the settlement participant has not opted into "direct-input" the settlement participant has to match the new trades. For details about CREST please refer to the CREST "PT Checklist".



- *Order Entry* window
- *Fast Order Entry window*
- *Mass Order Entry window*
- *Order Maintenance window*
- *Mass Order Maintenance window*
- *Own Order Overview* window
- *Back Office Information* window
- *Trade Information* window



- RPTTC810/RAWTC810 – Daily Trade Confirmation



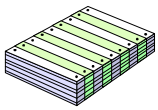
1.2.2 Order Entry for a Non-Eligible Instrument

Steps:

- Open the *(Mass) Order Entry* window or use the *Fast Order Entry* window. Further open the *Own Order Overview* window, *Back Office Information* window, and the *Trade Information* window.
- Enter an order for a non-eligible instrument and make sure that it is matched against one or several orders for this non-eligible instrument.
- Verify that non-eligible trades contain the original counterparty.
- Verify that all Trade Confirmations are listed in the Daily Trade Confirmation Report TC810 with its original counterpart.



- *Order Entry* window
- *Fast Order Entry window*
- *Mass Order Entry window*
- *Order Maintenance window*
- *Mass Order Maintenance window*
- *Own Order Overview* window
- *Back Office Information* window
- *Trade Information* window



- RPTTC810/RAWTC810 – Daily Trade Confirmation

1.2.3 Entry of an OTC-Trade

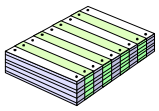


Steps:

- Open the *OTC-Trade Entry* window. Further open the *Back Office Information* window.
- Enter an OTC trade for an eligible instrument.
- Verify that the OTC trade contains the original counterparty.
- Verify that all Trade Confirmations are listed in the Daily Trade Confirmation Report TC810 with the correct counterparty.



- *OTC-Trade Entry* window
- *Order Maintenance window*
- *Own Order Overview* window
- *Back Office Information* window
- *Trade Information* window



- RPTTC810/RAWTC810 – Daily Trade Confirmation



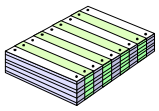
1.2.4 Trade Cancellation (for a specific eligible instrument)

Steps:

- Open the *(Mass) Order Entry* window or use the *Fast Order Entry* window. Further open the *Own Order Overview* window, *Back Office Information* window, and the *Trade Information* window.
- Enter an order for the instrument "IE0006765089" and make sure that it is matched against one or several orders.
- Verify that for each matched order one trade confirmation is sent.
- Verify that for eligible trades the counterparty is ECAG ("CCPIE").
- In the *Back Office Information* window check that one trade confirmation (unique trade ID) per matching transaction is sent.
- Open the *Trade Information* window and verify that for an order an execution confirmation for each partial execution is sent.
- Ask Market Supervision (Germany) to make a trade cancellation (trade reversal). Verify that a cancellation confirmation is sent.
- Verify that the original trade and the trade reversal are in the Daily Trade Confirmation Report TC810. The trade reversal is marked by Transaction Code = "R".



- *Order Entry* window
- *Fast Order Entry window*
- *Mass Order Entry window*
- *Order Maintenance window*
- *Mass Order Maintenance window*
- *Own Order Overview* window
- *Back Office Information* window
- *Trade Information* window



- RPTTC810/RAWTC810 – Daily Trade Confirmation

1.3 Risk Based Margining



The risk based margining of the ISE CCP is based on risk positions. The general approach to calculate margins consists of two steps. In the first step the mark-to-market principle is applied, which results in Current Liquidation Values (CLV). This step is essential to avoid any accumulation of loss. The second step is to calculate the so-called Additional Margin (AM). This component is calculated to cover the risk of an adverse one-day price movement in the security. This approach is implemented for Eurex derivatives, bonds, repos and equities, including ISE CCP.

Eurex Clearing AG is responsible for the risk management process. Risk management for the ISE CCP uses the existing infrastructure of Eurex. Therefore, the risk management procedure of the ISE CCP consists of the following three parts:

1. Calculating the risk based margin

2. Evaluating the collateral

3. Checking the margin coverage

These three parts are the important factors of the whole risk management system and are closely linked together. The general functions and their interdependence do not differ from the existing system.

ISE CCP positions are included in intraday and end-of-day margin calculations. The Risk calculation is done on NCM level, separated by client and house.

For Risk Based Margining, the reports are generated daily by Eurex and sent to clearing members that participate in the clearing of ISE Central Counterparty trades.



Eurex Business Date	Each batch day (please refer to section 3 Simulation Schedule)
Simulation hours	Each batch day 08:30 a.m. – 04:00 p.m.CET.
Reports available	Next day after batch run

Prerequisite

- Eurex infrastructure.



Report selection is done via Eurex infrastructure.

Steps in the Eurex System for requesting reports:

- Reports can be selected by clearing members via the *Report Selection* window. This window allows the user to select all available reports which are generated and sent to the member during end of day processing.

  The *Report Selection* window is accessible from the *Member* menu. For more details please refer to the Eurex @X-tract Clearing User Guide, section 4.8.3 Report Selection.

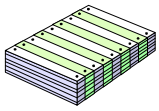
- Clearing members will provide the trading members with the NCM-reports.

Steps to verify margin calculation:

- Verify that all open positions are contained in the Risk Reports.
- Verify that positions which were closed by CREST settlement are no longer included in the Risk Reports.
- Verify that Corporate Actions are considered in the Risk Positions. Please refer to the simulation calendar (section 3) for the dates when corporate actions occur.
    - Dividend payments can be found in the reports with ISIN IE00000CASH3
    - For transformations the original open positions no longer exist in the reports after the corporate action. The open positions can be found in the reports with the new ISIN.
- Verify the Eurex margin calculation by using the theoretical files. For more details about the files please refer to Eurex Member Interface Specifications – File Layouts.



- *Report Selection window*



Reports for CM and NCM:

- RPTCC010/RAWCC010 – Premium Margin
- RPTCC011/RAWCC011 – Current Liquidating Margin
- RPTCC033 – Theoretical Values III
- RPTCC034 – Theoretical Values IV
- RPTCC040/RAWCC040– Liquidating Values
- RPTCC045/RAWCC045 - Additional Margin
- RPTCC050/RAWCC050 – Daily Margin
- RPTCC055/RAWCC055 – Daily Margin Offset
- RPTCC080/RAWCC080 – Security / Cash Risk Position

Reports for CM only:

- RPTCC060/RAWCC060 – Daily Margin Summary

Theoretical Files for CM and NCM

- Securities Margin Class and Group Information File – FPMGBP
- Theoretical Values: Equities – FPTHEE
- Theoretical Values: Unconditional Subscription Right - FPTHES



For detailed information about Eurex windows, reports and files please refer to:

- Eurex @X-tract Clearing User Guide
- Eurex Report Reference Manual
- Eurex Member Interface Specifications – File Layouts

For detailed information about the Risk Based Margining please refer to

- Eurex Risk Based Margining Brochure

2 Simulation Instrument List

CCP-eligible instruments for the Irish Stock Exchange	
ISIN	**Name**
IE0000020408	ABBEY PLC
IE0000527006	DATALEX PLC DL-,10
IE0000590798	DRAGON OIL PLC
IE0001390784	PROVIDENCE RESOURCES PLC
IE0002242869	THIRDFORCE PLC
IE0002588105	PADDY POWER PLC
IE0004614818	INDEPENDENT NEWS & MEDIA PLC
IE0005711209	ICON PLC
IE0006881506	HORIZON TECH GRP ORD EO 0.07
IE0030606259	BANK OF IRELAND
IE0033024807	UNITED DRUG PLC

Non-eligible instruments for the Irish Stock Exchange	
ISIN	**Name**
GB0001482891	VISLINK PLC
GB0001500809	TULLOW OIL PLC
GB0002162385	AVIVA PLC
GB0030365075	REAL ESTATE OPP

CCP-eligible instrument for Focus Days "Trade Cancellation"		
Date	**ISIN**	**Name**
13.10.2005 19.10.2005	IE0006765089	TRINITY BIOTECH PLC

2.1 Corporate Action Events

ISIN	IE0000590798	IE0030606259	IE0002588105	IE0000020408
CA Number	1	1	1	1
CA Description	Dividend	Dividend	Scheme of Arrangement	Take Over
CA Type	CHD	CHD	SOA	TKO
Generates Claims	Yes	Yes	No	No
Record Date	12 Oct 2005	17 Oct 2005	14 Oct 2005	24 Oct 2005
Payment Date	13 Oct 2005	18 Oct 2005	17 Oct 2005	25 Oct 2005
Security Transformed	No	No	Yes	Yes
CA Option	1	1	1	1
Benefit Security	N/A	N/A	IE0002588105	CT2040205001
Currency Code	EUR	EUR	N/A	N/A
Benefit Ratio	0.69	0.35	10.0	0.5
Debit Or Credit	Credit	Credit	Credit	Credit
CA Option			2	2
Benefit Security			CT204005003	CT2040205002
Currency Code			N/A	N/A
Benefit Ratio			1.0	1.0
Debit Or Credit			Credit	Credit
Transformation Date	N/A	N/A	12 Oct 2005	17 Oct 2005
Mandatory Or Voluntary Indicator	Mandatory	Mandatory	Mandatory with options	Voluntary

3 Simulation Schedule

Example according to the simulation calendar for a trade entered on 10.10.2005:

10.10. 2005 (T)

Order entry/Trade confirmation
Risk Reports contain the Open Position

12.10.2005 (T+1)

Risk Reports contain the open position

13.10.2005 (T+2)

Risk Reports contain the open position

17.10.2005 (T+3)

Settlement of trade
Risk Reports no longer contain the open position

The simulation calendar below shows the relevant events for each day.

ISE CCP Simulation Calendar
October 04, 2005 – October 28, 2005

40th week	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
Calendar Day	**03.10.2005**	**04.10.2005**	**05.10.2005**	**06.10.2005**	**07.10.2005**	**08.10.2005**	**09.10.2005**
Event		Release Simu ISE CCP	Release Simu ISE CCP	Release Simu ISE CCP	Release Simu ISE CCP	Release Simu ISE CCP	Release Simu ISE CCP
Batch Day	No	Yes	Yes	Yes	No	No	No
Business Day	04.10.2005	04.10.2005	05.10.2005	06.10.2005	10.10.2005	10.10.2005	10.10.2005

41th week	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
Calendar Day	**10.10.2005**	**11.10.2005**	**12.10.2005**	**13.10.2005**	**14.10.2005**	**15.10.2005**	**16.10.2005**
Event	Release Simu ISE CCP	Release Simu ISE CCP	Release Simu ISE CCP Focus Day Corporate Actions: Dividend claim Transformation	Release Simu ISE CCP Focus Day Trade Cancellation	Release Simu ISE CCP	Release Simu ISE CCP	Release Simu ISE CCP
Batch Day	Yes	No	Yes	Yes	No	No	No
Business Day	10.10.2005	12.10.2005	12.10.2005	13.10.2005	17.10.2005	17.10.2005	17.10.2005

42th week	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
Calendar Day	**17.10.2005**	**18.10.2005**	**19.10.2005**	**20.10.2005**	**21.10.2005**	**22.10.2005**	**23.10.2005**
Event	Release Simu ISE CCP Focus Day Corporate Actions: Dividend claim Transformation (Production Like Week in Eurex	Release Simu ISE CCP (Production Like Week in Eurex	Release Simu ISE CCP Focus Day Trade Cancellation (Production Like Week in Eurex	Release Simu ISE CCP (Production Like Week in Eurex	Release Simu ISE CCP	Release Simu ISE CCP	Release Simu ISE CCP
Batch Day	Yes	Yes	Yes	Yes	No	No	No
Business Day	17.10.2005	18.10.2005	19.10.2005	20.10.2005	24.10.2005	24.10.2005	24.10.2005

43th week	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
Calendar Day	**24.10.2005**	**25.10.2005**	**26.10.2005**	**27.10.2005**	**28.10.2005**	**29.10.2005**	**30.10.2005**
Event	Release Simu ISE CCP	Release Simu ISE CCP	Release Simu ISE CCP	Release Simu ISE CCP	End of Release Simu ISE CCP	Release Simu ISE CCP	Release Simu ISE CCP
Batch Day	Yes	No	Yes	Yes	No	No	No
Business Day	24.10.2005	26.10.2005	26.10.2005	27.10.2005	31.10.2005	31.10.2005	31.10.2005

4 Contacts for ISE CCP Simulation

Members can contact several parties with their questions and comments regarding the simulation using the following numbers:

Contacts at ECAG / DBAG

Customer Support Team

Ph: +49 (0)69 211 – 1 17 00 Monday - Friday 9.00am – 6.00pm
E-mail: customer.support@eurexchange.com

Requests in terms of simulation plan and organization can be addressed to the ISE CCP Customer Support Team.

Functional Helpdesk

Ph: +49 (0)69 211 – 1 14 00 Monday - Friday 8.00am – 6.00pm
E-mail: msfunctionalhelpdesk@deutsche-boerse.com

Functional ISE questions can be addressed to the Functional Helpdesk ISE CCP.

Helpdesk ISE

Hilary Kelleher

Ph: +35 31 617 4272

E-mail: hilary.kelleher@ise.ie

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CREST ENHANCEMENTS – OCTOBER 2005

A CCP FOR THE IRISH STOCK EXCHANGE

AND OTHER MISCELLANEOUS CHANGES

PARTICIPANT TESTING CHECKLIST

Abstract	This document aims to guide CREST users as to the testing relevant to the Irish CCP project and other miscellaneous changes.
Document Version	1.0
Document Status	FINAL
Date of Issue	12/09/2005
# Pages	30

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1. INTRODUCTION

1.1 Document Objectives

This document guides CREST users with possible test scenarios to be performed during participant testing the changes to be released to live running in CREST on 24th October 2005. Changes can be separated as those that form part of the ISE CCP service and those that are other miscellaneous changes, as detailed below:

ISE CCP Service

- Eurex Clearing AG (ECAG) will become the central counterparty for eligible trades dealt on the ISE Xetra order book

Other miscellaneous changes

- When opting into or out of settlement netting, CREST members will no longer require the settlement netting principal to sanction the changes; this applies to all settlement netting principals
- A new 'Operator Description' field will be introduced on the CREST GUI
- Face amounts must be supplied for MMI deliveries over the ISO Standard interface
- A new CREST character set will be used to harmonise the values that may be used in messages sent between CREST and the Single Settlement Engine
- Under certain circumstances there will be changes to the lifecycle of securities in CREST

This document does not define the actual scripts to be followed, or any mandatory testing, but provides recommended scenarios.

CREST users should ensure that testing appropriate to their business needs is covered.

1.2 Participant Testing Objectives

The main objectives of participant testing are:

- to allow CREST users to demonstrate the integrity of their own systems
- to allow CREST to demonstrate to the market the integrity of the enhanced CREST service.

1.3 Reference Documentation

[1] *Enhancing CREST: October 2005 – A central counterparty for the Irish Stock Exchange*
http://www.crestco.co.uk/publications/white_books/enhancing-oct-2005-ise.pdf

[2] FT Standard Interface Data Exchange Manual version 14.0
http://www.crestco.co.uk/home/home.html#/publications/dex_intro.html

[3] ISO Standard Interface Data Exchange Manual version 5.1
http://www.crestco.co.uk/home/home.html#/publications/iso_dex.html

[4] CREST enhancements – October 2005 – Technical newsletter 1
http://www.crestco.co.uk/publications/tech_news/oct05-tech1.pdf

[5] CREST enhancements – October 2005 – Technical newsletter 2
http://www.crestco.co.uk/publications/tech_news/oct05-tech2.pdf

[6] CREST enhancements – October 2005 – Technical newsletter 3
http://www.crestco.co.uk/publications/tech_news/oct05-tech3.pdf

[7] Test GUI version 17.54[1]

[1] This will be sent to users on a CD during the week commencing Monday 19 September 2005. This will **not** be the version that is used during live operation.

1.4 Change History

Version	Nature of change	Date
1.0	Initial version	12 September 2005

1.5 Abbreviations

Version	Nature of change
CA	Corporate Action
CCP	Central Counterparty
CLA	Claim
CMA	Cash Memorandum Account
DCM	Direct Clearing Member
DEL	Delivery
ECAG	Eurex Clearing AG
FT	File Transfer
GCM	General Clearing Member
GUI	Graphical User Interface
ISE	Irish Stock Exchange
IA	Interactive
ISO	International Standards Organisation
MMI	Money Market Instrument
MSV	Margin Stock Value
NCM	Non-Clearing Member
SSE	Single Settlement Engine
T	Trade date

1.6 Glossary

Central Counterparty: an entity that will become a counterparty to trades struck on an exchange in order to guarantee the delivery of the stock and cash.

Central Sponsor: a user who may input transactions into CREST on behalf of a number of participants, regardless of the participant's CREST user.

Clearing Member: a member of ECAG.

Direct Clearing Member: a member of ECAG who can only clear their own trades (as well as trades of any subsidiaries).

General Clearing Member: a member of ECAG who can clear their own trades as well as the trades of other organisations.

Non-Clearing Member: a member of ISE who is not also a member of ECAG and so cannot clear their own trades.

Settlement Agent: the CREST participant responsible for settling a transaction.

Settlement Firm: represents the entity responsible for the trades dealt on the ISE; see also *TSO Participant*.

Settlement Netting Principal: a CREST participant against which other participants can opt to net trades for settlement purposes.

Trade Feed Settlement Parties: represents the relationship between a settlement firm and the settlement participant.

TSO Participant: represents a member of the ISE; see also *Non-Clearing Member*. Note that, for the ISE CCP service, *TSO Participants* will be the same as the *Settlement Firms*.

2. FUNCTIONAL CHANGES

2.1 ISE CCP Service

FT and IA protocols are impacted by the ISE CCP service changes. Users may test one or both of these protocols. Users may also test using the ISO protocol where relevant[2].

2.1.1 Direct Input

ISE Xetra will forward CCP eligible trades via a trade feed to CREST. CREST participants acting as settlement agents for ISE trades may choose to opt into direct input for these trades.

Where the settlement agent for the trade has opted into direct input, CREST will create a pre-matched DEL. Settlement agents that have not opted into direct input will need to match transactions with the CCP manually.

2.1.2 Settlement Netting

Settlement agents may opt into settlement netting to reduce the number of settlements occurring in CREST. CREST members will no longer require the settlement netting principal to sanction changes to their netting options.

Settlement netting continues to be run twice on each settlement day in CREST.

Settlement agents may also choose whether their net transactions are to be created matched or unmatched.

2.1.3 Settlement

Settlement of gross and net transactions will continue unaffected.

2.1.4 CCP Open Positions

CREST will maintain CCP Open Positions, adding transactions into positions on input and removing transactions from positions on completion. Clearing members can request these positions.

2.1.5 Corporate Actions

CREST will apply standard corporate action processing to ISE transactions. In addition, standard buyer protection arrangements apply to ISE transactions. Members may elect on voluntary events and mandatory with options events following current practice and deadlines and transactions will be transformed in line with them.

2.2 Other miscellaneous changes

FT, IA and ISO Standard Interface protocols are all impacted by these changes. Users may test one or all of these protocols.

2.2.1 Settlement Netting Options

Settlement agents may opt into settlement netting to reduce the number of settlements occurring in CREST. CREST members will no longer require the settlement netting principal to sanction changes to their netting options. This applies to LSE and virt-x CCP services, as well as the ISE CCP service.

2.2.2 FT and IA Character Set Changes

Users can communicate with CREST via FT and interactively using the GUI.

[2] Note that to test using the ISO Standard Interface users must be registered as ISO users within the testing system.

A new character set, 'y', contains all characters available in both the existing CREST character set and the SSE character set. The new character set will restrict the characters that can be input in certain CREST fields.

Full details of the new 'y' character set is available in Annex B of the FT DEX, [2].

2.2.3 ISO Standard Interface changes

A user inputting a transaction involving an MMI over the ISO interface (via MT540/4) must supply the FAMT quantity type in field :36B: 'Quantity of Financial Instrument'.

All related ISO messages will report MMI quantities and balances with quantity type FAMT.

2.2.4 Operator description

A new 'Operator Description' field has been added to the 'Operator Details' screen of the CREST GUI. This 'Operator Description' field, which can be used to provide a more user-friendly identification of the operator, is optional and will be blank for all existing CREST operators. Users will be able to amend the 'Operator Description', if required.

2.2.5 Changes to the lifecycle of securities in CREST

Changes here result in additional file change messages being generated.

2.2.5.1 Amending the end date of a debt instrument

CREST will allow the end date of a debt instrument to be amended intra-day. Such an amendment will be notified to CREST users via the file change mechanism (QFCQ).

Amendments to the end date of a debt instrument may result in a change to its MSV category. Where this is the case, the amendment to the MSV category will become effective the following business day. CREST users will be notified when a change to the MSV category takes effect via a file change which will be available for collection on the following business day.

2.2.5.2 Re-enabling expired securities

After a security expires in CREST, it is now possible for the security to be re-enabled. Once re-enabled, CREST participants will be able to continue to input and settle transactions in CREST involving the security. The re-enablement will be a three stage process outlined as follows:

1. the security's end date will be amended to a date in the future. CREST will generate a file change that will be available for collection intra-day, using the file change mechanism (QFCQ). Transactions can continue to be input in the security but will not be able to settle at this point;
2. the security's status will be amended from 'expired' to 'disabled'. CREST will generate a file change overnight that will be available for collection the following business day. The security will be given a disable reason of 'other'. Transactions will still not be able to settle in the security; and
3. finally, the security's status will be amended from 'disabled' to 'enabled', whereupon transactions will be able to settle in the security. CREST will generate a file change that will be available for collection intra-day.

CREST will allow debt instruments, equities and collective instruments to be re-enabled; MMIs will not be re-enabled and will continue to deletion in CREST after being expired.

2.2.5.3 Re-using securities for transaction reporting

When a CREST participant requires that an expired security is maintained in CREST for transaction reporting purposes, it will be possible for the security to be re-instated 10 days after the security's end date.

Overnight, ten days after the security's end date, CREST will amend the following security details:

- the security category will be set to 'RES' for UK securities or 'FOR' for international securities;
- the security status will be set to 'enabled';
- the security will be marked as not able to settle in CREST; and
- the security end date will be left blank.

CREST will generate a file change overnight that will be available for collection the following business day via QFCQ.

CREST will allow debt instruments, equities and collective instruments to be re-used for transaction reporting. MMIs will not be able to be re-used and will continue to be deleted in CREST upon expiration.

2.2.5.4 Amending the security type of a security

CREST will allow equities to be changed to debt instruments or collective instruments when the security is non-settling in CREST. Changes to the security type will not be applicable when the security is available for settlement. Changes to the type of a security will be notified to CREST users via the file change mechanism (QFCQ).

CREST will generate a file change that will be available for collection intra-day informing users that the security type has changed. At this point, the security's status will be 'disabled'. If the security is to be made available for settlement, CREST will amend the security's status to 'enabled' and mark to security as able to settle generate a second file change, also available for collection intra-day. This will occur on the following business day.

3. BACKGROUND INFORMATION

3.1 Participant Testing Dates

Participant testing will take place between Monday 3 October and Friday 28 October 2005, with the exception of weekends. Users are not required to test every day, or for the whole testing period.

Users testing the miscellaneous changes are recommended to complete testing before Friday 21 October, as these changes will be released to live from Monday 24 October.

3.2 Systems

3.2.1 ISE CCP Service

Testing of the ISE CCP service will be an end-to-end process that begins with trade input on ISE Xetra and ends with settlement in CREST. The systems involved in testing are as follows:

- ISE Xetra – *Trading*;
- CREST – *Clearing and settlement*; and
- Eurex – *Collateral management and margin calls*.

3.2.2 Other miscellaneous changes

Testing of the other miscellaneous changes will involve CREST only.

3.3 Participant Testing Schedule

The participant testing schedule has not been tailored to suit each member's individual testing needs. As such, users are not obliged to cover all tests but may cover only those scenarios relevant to their business.

The first day of the testing period (Monday 3 October) is allocated for connectivity testing and base data set-up.

3.3.1 ISE CCP Service

3.3.1.1 Receipt of trades from ISE Xetra

Members wanting to test the Irish CCP service should be aware that CREST will only receive trades from ISE Xetra on the following dates:

- Tuesday 4 October – Thursday 6 October, inclusive
- Monday 10 October
- Wednesday 12 October and Thursday 13 October
- Monday 17 October – Thursday 20 October inclusive
- Monday 24 October
- Wednesday 26 October and Thursday 27 October.

Trades will only be received from ISE Xetra between the hours of 09:00 – 14:45 BST[3].

When a ISE CCP transaction fails to settle on its intended settlement date, CREST will attempt to settle the transaction on the next CREST business day. In addition, CREST will perform settlement netting on all CREST business dates.

[3] 08:00 – 13:45 GMT; 10:00 – 15:45 CET

3.3.1.2 Corporate actions

Members wanting to test the impact of corporate actions on ISE CCP trades should be aware of the following schedule.

- Claims will be raised on unsettled ISE CCP transactions where applicable between the record date and five business days after payment date of the related corporate action; the majority of claims are raised on record date.
- The relevant unsettled ISE CCP transactions will be transformed in line with buyer instructions overnight from transformation date for ten business days. Buyer instructions must be input before the last CCP instruction date and time.

Further details of corporate actions relevant for participant testing are listed in Section 4.6.

3.3.2 Changes to the lifecycle of a security

Members should note that file changes will be available for collection for two business days after the file change is created.

3.3.2.1 Amending the end date of a debt instrument

Members wanting to retrieve file changes generated when a debt instrument's end date is amended will be able to do so on Friday 14 October and Friday 28 October when CREST will amend the end date of a debt instrument.

3.3.2.2 Re-enabling expired securities

Members wanting to retrieve file changes generated when an expired security is re-enabled should be aware of the following testing schedule:

- a file change will be available for collection on Tuesday 11 October and Tuesday 25 October after the end date of an expired security is amended;
- a file change will be available for collection on Wednesday 12 October and Wednesday 26 October after the security's status is updated to 'disabled' overnight; and
- a final file change will be available for collection on Wednesday 12 October and Wednesday 26 October after the security is re-enabled.

3.3.2.3 Re-using securities for transaction reporting

Members wanting to retrieve file changes generated when a security is re-used for transaction reporting will be able to do so on Thursday 20 October and Thursday 27 October.

3.3.2.4 Amending the security type of a security

Members wanting to retrieve file changes generated when the security type of a non-settling equity is changed should be aware of the following testing schedule:

- a file change will be available for collection on Thursday 13 October and Thursday 27 October after the security type of a non-settling equity is amended;
- a file change will be available for collection on Friday 14 October and Friday 28 October after the security is enabled and made available for settlement.

3.3.3 Other miscellaneous changes

All other miscellaneous changes can be tested at any time during the testing period.

3.4 CREST Participant Testing Environment

The participant testing environment will be YF; the mode will be 'C'.

The testing system will operate to the current calendar date. At the end of each day CREST will run overnight batch and roll the system date to the next business day.

Users should enter data as they would in live operation. CREST will not instruct members on what to input but will impersonate other entities as required, and will act as System Control.

Users should note that this is not a volume testing environment.

3.5 Using the Participant Testing Environment

3.5.1 Log on to the GUI

CREST users will receive a copy of the test GUI v17.54 on CD. The test GUI should be used throughout this testing period.

When logging on to the GUI, in the 'Welcome' window select the 'Trialling System' option[4].

When logging on for the first time, log on as the operator MASTER with the password MASTER01. Any members who have previously used the CREST testing system will have had their master password reset to MASTER01.

3.5.2 Reset Master Password

When logging onto the GUI for the first time, the system will prompt a change to the master password. Select a new password that meets the following GUI password criteria:

- it must contain at least one numeric character in the password;
- it must contain at least one alphabetic character in the password;
- no more than two consecutive characters can be entered the same.

Make a note of the new password, as this will be your master password throughout the testing period.

3.5.3 Existing Operators

If operators are already set up in the CREST environment YF, but the password has been forgotten, it can be reset by logging on as the MASTER operator and selecting the System – Change Password option.

If existing operators require re-enabling this can be done from the Operator Details screen.

3.5.4 Additional Operators

When logged on to the GUI as the MASTER operator, users can set up any required operators using the Operator Details screen. FT, GUI and ISO operators can be set up as appropriate. Note that an operator can only be set up to use one of GUI, FT or ISO.

Users should be careful to keep a note of these operators and passwords since they will remain on the CREST database and can be used in future testing activities.

3.5.5 FT Message Header

When sending file transfers to the CREST testing environment, the file header mode field (:79:/HMDE/) should always be set to 'C'.

Members will need to ensure that all participant test messages have the mode set to 'C'. This will ensure that messages including live ISINs or participant data being used in testing do not impact data in the live system.

3.5.6 Next FT Sequence Number

The 'Next FT Sequence Number' for FT operators cannot be reset; those wishing to use existing operators will need to change their sequence number to match that of the CREST testing system. This can be viewed through the Operator Details screen.

All new operators set up will default to a 'Next FT Sequence Number' of one.

[4] The 'Trialling System' option should be selected each time you log onto the test GUI.

3.5.7 ISO User Set up

In order to use the ISO service during testing, CREST users must provide details of the default network and unsolicited operator to be used for ISO messaging. This will allow CREST to enable the user for the ISO service for the duration of the testing period.

Where the user requires unsolicited messages, they must opt into receiving these messages via the CREST GUI.

3.6 Contacts

If you have any queries prior to or throughout the testing period please contact any one of the following:

- David Hall, +44 (0)20 7849 0588; david.xhall@euroclear.com
- Jane Bamblett, +44 (0)20 7849 0226; jane.bamblett@euroclear.com
- Kelly Miah, +44 (0)20 7849 0296; kelly.miah@euroclear.com
- Chetan Chohan, +44 (0)20 7849 0610; chetan.chohan@euroclear.com

4. BASE DATA

4.1 Introduction

As part of Participant Testing various base data will be set up in CREST. Some of this data will be defined by the CREST Business Analysts and some will be set up based on information returned in booking forms.

The data that is set up from the information on the booking form is as follows:

- User ID;
- Gateway address(es);
- Common interface operator(s);
- Participant ID;

  Both clearing members and participants who act as settlement agents for ISE CCP trades will need to provide participant IDs

- Member account;
- Cap name; and
- CMA.

In addition, for participants testing the ISE CCP service, ISE members will complete a static data form detailing their settlement and clearing arrangements. This form will be sent out by ISE directly. The following data will be set-up from the information on the static data form:

- TSO participant and settlement firm[5];
- CCP clearing(s); and
- Trade feed settlement party(ies).

4.2 Participants

Details of the participants to be used by users taking part in Participant Testing will be set up based on the data returned on the booking form. In addition, the following participant IDs will be used during the testing period.

CCP	
CCPIE	Eurex's CCP, will become the counterparty to all ISE Xetra eligible trades
CREST Participants	
CPAY	CREST payment bank for members
STOCK	CREST participant with additional balances

4.3 Caps

Caps will be set up according to the information provided on the booking form. CREST, acting as a payment bank, will enable all caps. The secured/unsecured limits do not aim to reflect members live business but merely provide a starting point in all the appropriate currencies stated on the PT booking form.

Members that require increased or decreased headroom should input a cap amendment requesting an increase/decrease in the secured/unsecured limit and inform CREST that the cap requires to be re-enabled.

[5] For the ISE CCP service, the settlement firm will be the same as the TSO participant.

Users are advised to contact CREST in a timely manner if a specific set-up is required, such as the linking of member accounts and caps.

4.4 Securities

4.4.1 ISE CCP Service

The following securities, tradable on ISE Xetra, will be used in testing ISE CCP service.

ISIN	Security Abbreviation
CCP-eligible securities	
IE0000020408	ABBEY EUR0.32
IE0000527006	DATALEX ORD $0.10
IE0000590798	DRAGON OIL EURO
IE0001390784	PROVIDENCE RES ORD
IE0002242869	THIRDFRCE EUR0.125
IE0002588105	PADDY POWER PLC
IE0004614818	IND NEWS & MED 0.30
IE0005711209	ICON ORD E0.6C
IE0006765089	TRINITY BTECH US$
IE0006881506	HORIZON ORD
IE0030606259	BK OF IRELAND ORD
IE0033024807	UTD DRUG EUR 0.05
Non CCP-eligible securities	
GB0001482891	VISLINK ORD2.5P
GB0001500809	TULLOW OIL ORD10P
GB0002162385	AVIVA ORD 25P
GB0030365075	REAL ESTATE ZDP1P

4.4.2 Other miscellaneous changes

The following securities will be used in testing the other miscellaneous changes in this release.

ISIN	Security Abbreviation
Re-enabling expired securities	
CT2040204001	2040RE1 ISIN01
CT2040204002	2040RE1 ISIN02
Re-using securities for transaction reporting	
CT2040204003	2040TX1 ISIN01
CT2040204004	2040TX1 ISIN02
Amending the security type of a security	
CT0000000005	MINI REG STOCK 6
CT0077007709	TARIFF 7
Amending the end date of a debt instrument	
CT1601237511	1601 BGS 013
CT1810200105	1810P2ISIN105

4.5 Stock Balances

CREST, acting as a registrar, will credit each member's undesignated account with the necessary equity balances via an ARAN (Registrars adjustment) transaction.

Members that require additional stock balances should allege free of payment deliveries to the CREST Participant "STOCK". CREST will periodically match these transactions in order for the stock to move to the user's member account.

Members can also redistribute stock between their member accounts using OATs.

The balances created do not aim to reflect members live business but merely provide a starting nominal balance in all the appropriate ISINs listed in the base data section above.

4.6 Corporate Actions

The following corporate actions will be used to test the impact of corporate actions on ISE CCP transactions.

ISIN	IE0000590798	IE0030606259	IE0002588105	IE0000020408
CA Number	1	1	1	1
CA Description	Dividend	Dividend	Scheme of Arrangement	Take Over
CA Type	CHD	CHD	SOA	TKO
Generates Claims	Yes	Yes	No	No
Record Date	12 Oct 2005	17 Oct 2005	14 Oct 2005	24 Oct 2005
Payment Date	13 Oct 2005	18 Oct 2005	17 Oct 2005	25 Oct 2005
Security Transformed	No	No	Yes	Yes
CA Option	1	1	1 – default option	1
Benefit Security	N/A	N/A	IE0002588105	CT2040205001
Currency Code	EUR	EUR	N/A	N/A
Benefit Ratio	0.69	0.35	10.0	0.5
Debit Or Credit	Credit	Credit	Credit	Credit
CA Option			2	2
Benefit Security			CT204005003	CT2040205002
Currency Code			N/A	N/A
Benefit Ratio			1.0	1.0
Debit Or Credit			Credit	Credit
Transformation Date	N/A	N/A	12 Oct 2005	17 Oct 2005
Mandatory Or Voluntary Indicator	Mandatory	Mandatory	Mandatory with options	Voluntary

5. SCENARIOS – ISE CCP

These are suggested scenarios which users may or may not choose to follow. To give the user maximum flexibility to meet their business needs these scenarios do not specify the structure of any relevant messages. It is up to individual users to populate these messages as you would in live operation.

Throughout testing, users should monitor the enquiry screens as they would during live operation to help determine holdings, settlement positions and statuses. CREST **will not** be instructing users as to when enquiries should be input.

5.1 Scenario 1: Retrieve central sponsor details

5.1.1 Messages Covered

File Transfer			
Participant Inputs		**Participant Receives**	
Central sponsor details request	QSPQ vn 1	Central sponsor details response	QSPP vn 1
Interactive			
User Retrieves		Central sponsor list	

5.1.2 Aim

Users retrieve details of central sponsors in CREST and confirm those they wish to opt into direct input with.

5.1.3 Tasks and Expected Results

Task 1: Input QSPQ, or retrieve the central sponsor list via the GUI.

Expected Result: QSPP is returned with details of all central sponsors in CREST, or can view the list via the GUI. One of those central sponsors is ECAG, who acts as the central sponsor for ISE Xetra trades.

5.2 Scenario 2: Retrieve and amend direct input options

5.2.1 Messages Covered

File Transfer			
Participant Inputs		**Participant Receives**	
Direct input option details request	IDIQ vn 1	Direct input option details response	IDIP vn 1
Direct input option amend request	IDIA vn 1		
Interactive			
Participant Retrieves		Direct input options	
Participant Updates		Direct input options	

5.2.2 Aim

Participants who are settlement agents for ISE CCP trades retrieve and amend direct input options.

5.2.3 Tasks and Expected Results

Task 1: Input IDIQ, or retrieve direct input options via the GUI.

Expected Result: The participant receives IDIP, or can view existing direct input options.

Task 2: Input IDIA, or amend direct input options via the GUI.

Expected Result: The participant can amend direct input options. Participants who opt into direct input will no longer need to match ISE CCP transactions in eligible securities. Participants who opt out of direct input will be required to match ISE CCP transactions.

5.3 Scenario 3: Retrieve and amend settlement netting options

5.3.1 Messages Covered

File Transfer			
Participant Inputs		**Participant Receives**	
Settlement netting option details request	INOQ vn 2	Settlement netting option details response	INOP vn 2
Settlement netting option amend request	INOA vn 2		
Interactive			
Participant Retrieves		Settlement netting options	
Participant Updates		Settlement netting options	

5.3.2 Aim

Participants who are settlement agents for ISE CCP trades retrieve and amend existing settlement netting options. Amendments do not need to be sanctioned by the settlement netting principal before taking effect.

5.3.3 Tasks and Expected Results

Task 1: Input INOQ, or retrieve settlement netting options via the GUI.

Expected Result: The participant receives INOP, or can view existing settlement netting options.

Task 2: Input INOA, or amend settlement netting options via the GUI.

Expected Result: The participant can amend settlement netting options. Amendments will be applied immediately, without a settlement netting principal sanctioning the amendment. Transactions against the settlement netting principal will be netted for settlement taking new netting options into account. Any transactions netted before the amendment will not be re-evaluated.

5.4 Scenario 4: Retrieve TSO participants

5.4.1 Messages Covered

File Transfer			
Participant Inputs		**Participant Receives**	
TSO participant request	GTPQ vn 1	TSO participant response	GTPP vn 1
Interactive			
Participant Retrieves		TSO participant list	

5.4.2 Aim

Participants who are settlement agents for ISE CCP trades view relationships involving settlement firms for whom that participant settles trades.

Participants of type clearing member view relationships involving settlement firms for whom that participant clears trades.

5.4.3 Tasks and Expected Results

Task 1: Input GTPQ, or retrieve TSO participants via the GUI.

Expected Result: The participant receives GTPP, or can view the appropriate relationships as above.

5.5 Scenario 5: Retrieve trade feed settlement party details

5.5.1 Messages Covered

File Transfer			
Participant Inputs		**Participant Receives**	
Trade feed settlement participant request	GTSQ vn 1	Trade feed settlement participant response	GTSP vn 1
Interactive			
Participant Retrieves		Trade feed settlement parties list	

5.5.2 Aim

Members retrieve information about the settlement firms for which they are the settlement agent.

Participants type of clearing member retrieve information for settlement firms for whom the requesting participant clears trades.

5.5.3 Tasks and Expected Results

Task 1: Input GTSQ, or retrieve trade feed settlement parties via the GUI.

Expected Result: The participant receives GTSP, or can view the appropriate relationships.

5.6 Scenario 6: Retrieve CCP Clearing data

5.6.1 Messages Covered

File Transfer			
Participant Inputs		**Participant Receives**	
CCP clearing request	GCCQ vn 1/2	CCP clearing response	GCCP vn 1/2
Interactive			
Participant Retrieves		CCP clearing list CCP clearing details	

5.6.2 Aim

Participants of type clearing member retrieve CCP clearings relating to their clearing member.

5.6.3 Tasks and Expected Results

Task 1: Input GCCQ, or retrieve the CCP clearing list via the GUI.

Expected Result: The participant receives GCCP, or can view all CCP clearings relating to their clearing member.

Task 2: Retrieve CCP clearing details via the GUI.

Expected Result: The participant can view details of the specific CCP clearing.

5.7 Scenario 7: Input and matching

5.7.1 Messages Covered

File Transfer			
Participant Inputs		**Participant Receives**	
Delivery input	ADVN vn 3		
Transaction request	ATXQ vn 11	Transaction response	ATXP vn 11

File changes request	QFCQ vn 12/13	Transaction status change response	ATSP vn 2
Transaction status history request	ATHQ vn 2	Transaction status change response	ATSP vn 2
Transaction amend	ATXA vn 4		
Interactive			
Participant Inputs		Delivery details	
Participant Retrieves		Delivery details Transaction status history	
Participant Updates		Delivery details	
ISO			
Participant Inputs		**Participant Receives**	
Settlement instruction	MT540/3		
Request for status advice	MT549	Settlement status and processing advice	MT548
		Settlement status and processing advice – unsolicited	MT548

5.7.2 Aim

Settlement instructions for trades input in ISE Xetra are viewed, retrieved and matched in CREST by participants who are settlement agents for the trade. Where the participants have not opted into direct input a matching instruction can be input into CREST.

Both CCP eligible trades and CCP ineligible trades are considered.

5.7.3 Tasks and Expected Results

Task 1: A trade is input on ISE Xetra by the ISE member which is CCP eligible.

Expected Result: The trade is transmitted to CREST and a matched or unmatched DEL transaction is created in line with participants' direct input options.

Task 2: Where the participant is not opted into direct input, the participant inputs ADVN, delivery details via the GUI, or MT540/3 via ISO to match the transaction.

Expected Result: The transaction is matched in CREST.

Task 3: Participant inputs QFCQ to receive status changes for transactions, views the transaction status history via the GUI, inputs MT549 requesting status details, or receives unsolicited MT548 messages.

Expected Result: The participant receives ATSP, views the transaction status on the GUI, or receives MT548; the transaction status is matched.

Task 4: Input ATXQ, or view delivery details via the GUI.

Expected Result: Participant receives ATXP, or views details on the GUI, and confirms the transaction details are as expected.

Task 5: Input ATXA, or amend transaction details via the GUI.

Expected Result: Transaction details are amended in line with details supplied by the participant.

Task 6: A trade is input on ISE Xetra by the ISE member which is not CCP eligible.

Expected Result: The trade is not transmitted to CREST; both settlement participants must input ADVN, delivery details via the GUI, or MT504/3 via ISO to create the transaction in CREST for settlement.

5.8 Scenario 8: Settlement netting

5.8.1 Messages Covered

File Transfer			
Participant Inputs		**Participant Receives**	
Delivery input	ADVN vn 3		
Transaction request	ATXQ vn 11	Transaction response	ATXP vn 11
File changes request	QFCQ vn 12/13	Transaction status change response	ATSP vn 2
Transaction status history request	ATHQ vn 2	Transaction status change response	ATSP vn 2
Net transactions retrieve request	ANTQ vn 1	Net transactions response	ANTP vn 1
Net constituents retrieve request	ANCQ vn 1	Net constituents retrieve response	ANCP vn 1
Interactive			
Participant Inputs		Delivery details	
Participant Retrieves		Transaction status history	
		Net transactions list	
		Net constituents list	
ISO			
Participant Inputs		**Participant Receives**	
Settlement instruction	MT540/3		
Request for status advice	MT549	Settlement status and processing advice	MT548
		Settlement status and processing advice – unsolicited	MT548

5.8.2 Aim

Ensure netting options are applied and net transactions are created as expected. Ensure net transactions can be matched where participants have not opted into direct input.

5.8.3 Tasks and Expected Results

Task 1: Trade is input on ISE Xetra by the ISE member.

Expected Result: The trade is transmitted to CREST and a matched or unmatched DEL transaction is created in CREST. Once the transaction is matched (either automatically by CREST or manually by the participant – See Scenario 7) the trade is put forward for netting in line with the participant's settlement netting options. CREST creates net transactions after diary event 2032 is actioned.

Task 2: Participant inputs QFCQ to receive status changes for transactions, ATHQ, views the transaction status history via the GUI, inputs MT549 requesting status details, or receives unsolicited MT548 messages.

Expected Result: The participant receives ATSP, views the transaction status on the GUI, or receives MT548; the transaction status is netted.

Task 3: Input ANTQ, or retrieve the net transactions list on the GUI.

Expected Result: Participant receives ANTP, or views the details on the GUI. All net transactions can be retrieved.

Task 4: Input ATXQ for the net transaction, or retrieve net transactions via the GUI.

Expected Result: Participant receives ATXP, or views details on the GUI and confirms the transaction details are as expected.

Task 5: Input ANCQ, or retrieve the net constituents list on the GUI.

Expected Result: Participant receives ANCP, or views the details on the GUI. All gross transactions included in the relevant net transaction are returned.

Task 6: Where the participant is not opted into direct input for net transactions, the participant inputs ADVN, delivery details via the GUI, or MT540/3 via ISO where possible[6] to match the transaction.

Expected Result: The net transaction is matched in CREST.

5.9 Scenario 9: Settlement

5.9.1 Messages Covered

File Transfer			
Participant Inputs		**Participant Receives**	
File changes request	QFCQ vn 12/13	Transaction status change response	ATSP vn 2
Transaction status history request	ATHQ vn 2	Transaction status change response	ATSP vn 2
Interactive			
Participant Retrieves		Delivery details Transaction status history	
ISO			
Participant Inputs		**Participant Receives**	
		Settlement confirmation	MT544/7

5.9.2 Aim

On settlement date (T+3), transactions settle in CREST either on either a gross or net basis.

5.9.3 Tasks and Expected Results

Task 1: The transaction settles. Participant inputs QFCQ, ATHQ, or retrieves delivery details or transaction status history via the GUI.

Expected Result: The participant receives ATSP, or views status details on the GUI. The transaction status is shown as settled. Where the user is an ISO user, the user receives MT544/7.

5.10 Scenario 10: Retrieve CCP open position data

5.10.1 Messages Covered

File Transfer			
Participant Inputs		**Participant Receives**	
CCP open position request	BCPQ vn 1	CCP open position response	BCPP vn 1
CCP settlement firm open position request	BDPQ vn 2	CCP settlement firm open position response	BDPP vn 2
Interactive			
Participant Retrieves		CCP open position list CCP settlement firm open position list	

5.10.2 Aim

Clearing members retrieve their CCP open positions, either netted across all settlement firms, or for an individual settlement firm.

Settlement agents for ISE CCP transactions retrieve CCP open positions for a settlement firm for whom they settle transactions.

[6] In some cases, for example where netting results in securities and securities and cash being debited from the same participant, participants will not be able to match the net transaction via ISO.

5.10.3 Tasks and Expected Results

Task 1: Input BCPQ, or retrieve CCP open positions on the GUI.

Expected Result: The participant receives BCPP, or can view data on the GUI for their clearing member.

Task 2: Input BDPQ, or retrieve CCP settlement firm open positions on the GUI.

Expected Result: The participant receives BDPP for each settlement firm, or can view the data on the GUI.

5.11 Scenario 11: Corporate Actions

5.11.1 Messages Covered

File Transfer			
Participant Inputs		**Participant Receives**	
Transaction request	ATXQ vn 11	Transaction response	ATXP vn 11
Transaction CA option input	ACON vn 1		
Transaction CA option request	ACOQ vn 2	Transaction CA option response	ACOP vn 2
File changes request	QFCQ vn 12/13	Transaction status change response	ATSP vn 2
Transaction status history request	ATHQ vn 2	Transaction status change response	ATSP vn 2
Interactive			
Participant Retrieves		Claim details	
		Delivery details	
		Transaction CA option list	
		Transaction status history	
Participant Inputs		Transaction CA option	
ISO			
Participant Inputs		**Participant Receives**	
Request for status advice	MT549	Settlement status and processing advice	MT548
		Settlement status and processing advice – unsolicited	MT548

5.11.2 Aim

Unsettled CCP transactions may result in claims or transformations based on buyer elections. Ensure participants can successfully process these events.

5.11.3 Tasks and Expected Results

Task 1: An unsettled CCP transaction exists which requires a claim to be raised to redistribute the benefit due from a corporate action.

Expected Result: The appropriate claim is generated in CREST overnight.

Task 2: Input ATXQ, or retrieve claim details via the GUI.

Expected Result: Participant receives ATXP, or views details on the GUI, and confirms claim details are as expected.

Task 3: An unsettled CCP transaction exists which is subject to a mandatory with options or voluntary corporate action. Input ACON, or instruct on an option via the GUI.

Expected Result: The instruction is recorded in CREST.

Task 4: Input ACOQ, or retrieve transaction CA option list via the GUI.

Expected Result: The participant receives ACOP including the instruction input previously, or the instruction can be viewed via the GUI.

Task 5: The unsettled CCP transaction is transformed in CREST overnight.

Expected Result: CREST completes the original transaction and creates a new transaction, taking into account the instructions of the participant.

Task 6: Input QFCQ to receive status change for transactions, ATHQ, view the transaction status history via the GUI, input MT549 requesting status details or receive unsolicited MT548 messages.

Expected Results: Participant receives ATSP, views transaction status on the GUI, or receives MT548. The original transaction is transformed and the new transaction is reported.

Task 7: Input ATXQ for the new transaction, or view delivery details via the GUI.

Expected Result: Participant receives ATXP, or views details on the GUI, and confirms the transaction details are as expected.

6. SCENARIOS – OTHER MISCELLANEOUS CHANGES

6.1 Scenario 1: Operator Description

6.1.1 Messages Covered

Interactive	
User Inputs	Operator details
User Updates	Operator details
User Retrieves	Operator details

6.1.2 Aim

Ensure that the new 'Operator description' field can be viewed, added and amended.

6.1.3 Tasks and Expected Results

Task 1: Input operator details via the GUI.

Expected Result: A new operator can be created with the 'Operator description' field completed or left blank.

Task 2: Update operator details via the GUI.

Expected Result: Operator details can be amended, including the 'Operator description' field.

Task 3: Retrieve operator details via the GUI.

Expected Result: The user views details, including the 'Operator description' field.

6.2 Scenario 2: Transactions input for MMIs over ISO

6.2.1 Messages Covered

ISO			
Participant Inputs		**Participant Receives**	
Settlement instruction	MT540/3	Settlement allegement – unsolicited	MT578
		Settlement confirmation – unsolicited	MT544/7
Request for status advice	MT549	Settlement status and processing advice – may be received unsolicited	MT548
Request for status advice	MT549	Statement of holdings (stock balances) – may be received unsolicited	MT535
Request for status advice	MT549	Statement of holdings (open stock balances) – may be received unsolicited	MT535
Request for status advice	MT549	Statement of transactions – may be received unsolicited	MT536
Request for status advice	MT549	Statement of pending transactions – may be received unsolicited	MT537

6.2.2 Aim

Ensure that MMI deliveries can be input via the ISO interface with a quantity type of 'FAMT'. Ensure that all related ISO messages report MMI quantities and balances with the quantity type 'FAMT'.

6.2.3 Tasks and Expected Results

Task 1: Participant inputs MT540/3 with a quantity type of 'FAMT' for an MMI delivery.

Expected Result: A DEL transaction is created with the correct quantity. A MT578 is generated and sent to the counterparty to the trade containing quantity type 'FAMT'.

Task 2: The DEL settles in CREST.

Expected Result: The participant receives MT544/7 with quantity type 'FAMT'.

Task 3: The participant inputs MT549 to request MT535, MT536, MT537 or MT548, or received unsolicited messages.

Expected Result: The messages returned are generated reporting MMI quantities and balances with the quantity type 'FAMT'.

6.3 Scenario 3: Changes to security lifecycle

6.3.1 Messages Covered

File Transfer			
Participant Inputs		**Participant Receives**	
File change request	QFCQ vn 12/13	Security details response	FSEP vn 4/5
		Full security details response	FSFP vn 9/10
Security details request	FSEQ vn 4/5	Security details response	FSEP vn 4/5
Security full details request	FSFQ vn 9/10	Security full details response	FSFP vn 9/10
Interactive			
Participant Retrieves		Security details	

6.3.2 Aim

Confirm that users back office systems can successfully process file changes generated as a result of changes to the lifecycle of a security in CREST.

6.3.3 Tasks and Expected Results

Task 1: Participant inputs QFCQ, FSFQ or FSEQ at various points throughout the testing period, or views security details via the GUI.

Expected Result: Participant receives FSEP or FSFP when there are changes to a security, or views security details on the GUI. CREST will make these changes as detailed below.

Date	File Changes Available
Tuesday 11 October	The end date of an expired security will be amended to allow for the security to be re-enabled on Wednesday 12 October
Wednesday 12 October	The security amended on Tuesday 11 October will be reported as disabled
	The security will subsequently be re-enabled
Thursday 13 October	The security type of a non-settling equity will be amended to show 'debt instrument'
Friday 14 October	The non-settling debt instrument created on Thursday 13 October will be amended to allow settlement and enabled
	The end date of an enabled debt instrument will be amended; the MSV category of the debt instrument will be amended overnight
Monday 17 October	The MSV category of the debt instrument amended on Friday 14 October will be updated overnight to reflect the new end date
Thursday 20 October	A security will be made available for transaction reporting via a change to the security's category

Date	File Changes Available
Tuesday 25 October	The end date of an expired security will be amended to allow for the security to be re-enabled on Wednesday 26 October
Wednesday 26 October	The security amended on Tuesday 25 October will be reported as disabled
	The security will subsequently be re-enabled
Thursday 27 October	The security type of a non-settling equity will be amended to show 'debt instrument'
	A security will be made available for transaction reporting via a change to the security's category
Friday 28 October	The non-settling debt instrument created on Thursday 27 October will be amended to allow settlement and enabled
	The end date of an enabled debt instrument will be amended; no change will be required to its MSV category

Note that file changes are cleared from CREST after two business days.

6.4 Scenario 4: New SSE character set 'y'

6.4.1 Messages Covered

File Transfer			
Participant Inputs		**Participant Receives**	
Cap details input	JCPN vn 1		
Cap details amend	JCPA vn 1		
Cap details delete	JCPD vn 1		
Cap sanction amend	JCSA vn 1		
Cap details request	JCPQ vn 1/2	Cap details response	JCPP vn 1/2
Participant details input	GPAN vn 3/4		
Participant details request	GPAQ vn 7	Participant details response	GPAP vn 7
Investor details amend	HIDA vn 1		
Investor accept	HIAA vn 1		
Proxy instruction investor details amend	HPIA vn 1		
Transaction request	ATXQ vn 11/12	Transaction response	ATXQ vn 11/12
Proxy instruction request	KPIQ vn 1	Proxy instruction response	KPIP vn 1
Interactive			
User Retrieves		Participant details	
Participant Retrieves		Cap details Investor details Proxy instruction investor details	
Participant Inputs		Cap details	
Participant Updates		Cap details Investor details Residual investor details Proxy instruction investor details	
Participant Deletes		Cap details	
Payment Bank Sanctions		Cap details	

6.4.2 Aim

Ensure that the correct character validation is applied to the input of the above messages. These instructions are impacted by the introduction of the new 'y' character set. The following fields in these messages are impacted by this change:

- Cap Name;
- Name Investor;
- Address Line 1-5;
- Post Code;
- Next Name Investor;
- Next Address Line 1-5; and
- Next Post Code.

6.4.3 Tasks and Expected Results

Task 1: Participant sends a selection of the above input or amend messages with the relevant field populated with an unaccepted character (i.e. '**[**', '**£**' and '**~**' values from 'x' character set).

Expected Result: CREST will reject the message with the appropriate error reason.

Task 2: Participant sends a selection of the above input or amend messages with the relevant field populated with an accepted character (i.e. '**&**', '**<**' and '**(**' values from the 'y' character set).

Expected Result: CREST will accept the instruction and process accordingly.

Task 3: Participant sends a selection of the above request messages to retrieve information held in CREST. Relevant fields in the response messages contain values that were input prior to the October 2005 software release (i.e. characters that are now invalid).

Expected Result: CREST will accept the request message and send a response message containing the affected field values.

Task 4: Participant sends a selection of the above amend messages to remove/amend the details previously populated with a now unaccepted character. (The underlying details were created in CREST prior to the release).

Expected Result: CREST will reject the message with the appropriate error reason.

7. PARTICIPANT TESTING DAILY TIMETABLE

7.1 Introduction

The testing day will run between 09:00 – 16:00 BST[7], and will be supported throughout this time.

The diary may change as testing progresses, or depending on the type of testing being carried out on a particular day. Note that diary times are shown in GMT on CREST.

7.2 Timetable

Significant events have been highlighted.

Event	Description	Time (GMT)
403	CCSS Accept Enable	07:45
801	Partial Outstanding REG	07:50
401	Start Standard Settlement (also starts gilt settlement)	08:00
415	Intra-day Liquidity Projection	08:15
201	Circles	08:20
761	Enable Outbound Cross-Border CA Messages	08:50
550	Pre-fund Cross-Border Transactions	08:55
202	Gilts-only Circles	09:05
740	DBV Stock Valuation	09:20
780	Release Dependent Trades	09:25
501	Remove Cash Freeze	09:30
202	Gilts-only Circles	09:35
740	DBV Stock Valuation	09:45
762	Disable Outbound Cross-Border CA Messages	10:25
202	Gilts-only Circles	10:30
120	Stop DVP Equity Settlement	12:00
740	DBV Stock Valuation	12:00
2080	MMI Issuance Deadline	12:00
202	Gilts-only Circles	12:05
250	Disable Gilt Amendment	12:25
130	Stop DVP Gilts and Cash Settlement	12:30
740	DBV Stock Valuation	12:31
751	Start DBV Settlement	12:35
140	EUR, USD & CHF Payments Deadlines	12:40
414	DBV Input Disable	12:45
752	Stop DBV Settlement	12:50

[7] 10:00 – 17:00 CET; 08:00 – 15:00 GMT

Event	Description	Time (GMT)
150	GBP Payments Deadline	12:51
160	Stop FOP Equity Settlement	12:55
165	Stop Swiss FOP Receipt	12:55
421	Unwind to Bank	13:00
170	Stop FOP Gilts Settlement	13:01
422	End of Repo Unwind	Auto-generated
416	End of Day Liquidity Projection	13:20
1701	Generate CI EOD Report Requests	13:25
1401	CCP Clearing Amend	13:25
2032	Net Transactions Created	Auto-generated Approx 13.30
404	CCSS Accept Disable	14:30
406	Input Disable	14:30
416	End of Day Liquidity Projection	14:30
2032	Net Transactions Created	Auto-generated Approx 14.30
1005	End of Day	15:00

8. MESSAGES REMOVED FROM CREST

The following messages have been removed from CREST:

- Settlement netting option sanction list request (INSL)
- Settlement netting option sanction list response (INSM)
- Settlement netting option sanction request (INSA)

The following messages versions have been removed from CREST:

- Settlement netting option list request (INOQ version 1)
- Settlement netting option list response (INOP version 1)
- Settlement netting option amend request (INOA version 1)
- Settlement netting option list request (INOL version 1)
- Settlement netting option list response (INOM version 1)